In the Claims:

1 - 39. (cancelled)

40. (new) A method of testing integrity of a barrier by transferring material from one side of the barrier through a continuous path directly into a NMR analysis system and using the NMR analysis system to determine from the transferred material if there has been any leakage through the barrier.

41. (new) A method of testing integrity of a barrier by transferring material from one side of the barrier for accumulation within a NMR analysis system and using the NMR analysis system to determine from the accumulated material if there has been any leakage through the barrier.

42. (new) A method of testing integrity of a filled end product container, that is filled with the end product material, by using a NMR analysis system to determine whether end product material has leaked from the filled end product container and using this determination to validate the filled end product container.

43. (new) The method of claim 41 without using a helium tracer added to the material.

44. (new) The method of claim 40 in which a pumping system is used to transfer materials into the NMR analysis system.

45. (new) The method of claim 40 and using a sniffing probe means that can be moved relative to the surface of the barrier so as to allow materials to be collected from different positions relative to the barrier for transfer into the NMR analysis system.

46. (new) The method of claim 40 where a hood chamber at least partially covers and is sealed to the barrier or container surface so as to allow material from this section of the barrier or container surface to be collected for transfer into the NMR analysis system.

47. (new) The method of claim 42 where the container comprises any of: electrical equipment charged with a fluid, and an inhaler charged with end product filling materials

including propellant fluid, and the testing comprises testing for leakage of this fluid from the container.

48. (new) The method of claim 42 having a step of accumulating leakage in a separate chamber prior to the transfer to the NMR analysis system.

49. (new) The method of claim 48 where the accumulation of material for analysis also occurs within the NMR analysis system.

50. (new) The method of claim 40 where some or all of the fluid material contains fluorine compounds, and the NMR analysis involves detecting fluorine.

51. (new) The method of claim 48, having any of the steps of: moving the accumulation chamber into an NMR analysis system; transferring the accumulation chamber contents into a second container for analysis and then transferring the second container contents into an NMR analysis system; and transferring the accumulation chamber contents into a second container for analysis and then moving this container for analysis into an NMR analysis system.

52. (new) The method of claim 40, having the step of carrying out the NMR analysis for multiple barriers, multiple containers, or both types, simultaneously.

53. (new) The method of claim 40 having any of the steps of: cooling the materials; accumulating leakage on a cooled surface then measuring the amount accumulated; accumulating the leakage on a cooled surface located within the NMR analysis system, to accumulate materials directly within the NMR analysis system, and accumulating the leakage on a cooled surface and moving the cooled surface relative to an NMR analysis system, to carry out the measurement after a period of accumulation.

54. (new) The method of claim 48, having the step of evacuating the chamber that is to be used for accumulation prior to transfer into the NMR analysis system before accumulating material leakage.

55. (new) Test equipment having means for validating inhaler integrity using a NMR analysis system for analysis of material leakage accumulated within the NMR analysis system.

56. (new) The test equipment according to claim 55 having any of: a transfer type vacuum pumping system means for transferring material leakage into the NMR analysis system, a pressure pumping system means for transferring material leakage into the NMR analysis system, and a transfer type vacuum and pressure pumping system combination for transferring material leakage into the NMR analysis system.

57. (new) The test equipment according to claim 55 arranged to transfer the accumulated material to another chamber means for introduction into the NMR analysis system for analysis of the leakage.

58. (new) The test equipment according to claim 55 where the fluid is fluorine containing and the NMR analysis is for ^{19}F nuclei contained within the fluid molecules.

59. (new) The test equipment according to claim 55 having a cooled surface and apparatus for transferring material accumulated on the cooled surface to the NMR analysis system.

60. (new) The test equipment according to claim 55 arranged to pre evacuate the accumulation chamber.

61. (new) The test equipment according to claim 59 whereby the cooling surface comprises a Peltier effect device.

62. (new) The test equipment according to claim 55 and having a calibrator arranged to use a material of the chamber to provide a calibration means for the NMR analysis system.

63. (new) The test equipment according to claim 55 having apparatus arranged to cross check integrity validation with an off-line NMR analysis system.

64. (new) A product validated by the method of claim 42.